



THOMAS G. NEWMAN,
EDITOR.

Vol. XXIII. March 23, 1887. No. 12.



Forward! March! And March is here, blustering some, but it is drying up the mud and letting the ice and snow melt gently under the rays of Old Sol. So far, the bees are doing finely, and everything promises for a good season for both bees and honey.

Shipping Honey to Great Britain was the subject which brought the Ontario Bee-Keepers' Association together at Toronto, on March 16. After much discussion it was decided that the shipping of honey in the future be left to individuals, or that some competent persons should purchase it in Canada and take it under their personal supervision to Europe and sell it there for themselves. The association concluded that it could not undertake the work.

B. Z. Smith, of Douglass County, Ill., has issued a circular on the advantages of Alsike clover, which he is freely distributing among the farmers in his locality, in order to increase honey production. This is very praise-worthy, and shows energy and business-like qualities, which should be practiced by apiarists all over the country. Mr. Smith requested us to get up a Leaflet some weeks ago on this subject, but we were feeling so unwell then that we could not undertake it. Now we have done so, and as it is just the time to sow the seed, let them fly all over the country.

The Outlook in Florida.—Mr. John Y. Detweiler writes thus to the *Dispatch*:

Mr. Ira D. Barber, of New York, has been here for two weeks, and expressed himself highly satisfied with the condition of the colonies. Mr. B. is a veteran bee-keeper, and is one of the few men who winter their bees successfully. He and his brother keep nearly 500 colonies. His first visit to this place was in December, 1883, and now, since the mangrove has been destroyed, he expresses the opinion that the outlook would not justify much of an expenditure for the production of either comb or extracted honey.

To be Known, a man must keep his name before the people, and let them know where he is, and what he is doing, as well as what he has for sale.

More Lies about Honey.—Mr. T. R. Whinery, of Winona, O., writes to the *BEE JOURNAL* as follows:

On page 611 of Johnson's New General Encyclopaedia I find the following: "Honey is said to be now much adulterated with glycerine, and even imitated, as a whole, by combining the latter product with other material, and flavoring with appropriate essential oils." Now I would like to know whether it is possible to adulterate honey with glycerine.

It is "possible" to mix glycerine with extracted honey, but it is *not done*, because it is not profitable to do so—and all adulterators look out for that; that is their prime incentive. Glycerine is worth three or four times as much as extracted honey, and you may as well talk about adulterating silver by putting "pure gold" into it, as to think of adulterating honey with glycerine!!

Since the Wiley *lie* about comb honey was published as a "scientific pleasantry," every editor, author, and correspondent seems to have a "license" to add more *lies* about honey to the large stock already published. They will go so far as to even intimate that honey is made as a whole from glycerine and other ingredients, flavored with essential oils. The fools never stop to think that this "stuff" would cost three or four times as much as the pure, unadulterated, extracted honey could be purchased for! These fellows lie out of whole cloth when the truth would serve them far better!

Mr. E. Sanford writes thus to the editor: "I think you ought to ask for some able article on the question of grocery-men not wanting to sell extracted honey, for fear that it will hurt the sale of their syrup trade. Then let bee-men have it published in their home papers."

This is a question of "business," and we hardly know what more could be said to induce grocery-men to push the sale of extracted honey when put up in nice salable packages, than has already been printed in this *JOURNAL*. If any "able articles" are offered on that subject they will receive our best attention and full endorsement.

A West Virginia Bee-Keeper tells how he out-witted the middle-man of his home town, as follows:

Last fall I drove into a town, a few miles distant, with a load of honey, and went to the principal dealer in honey and stated my price. Said he: "I can buy just as nice honey as that for 10 cents." "And you retail it for 20 cents, do you?" "Yes, and have no trouble to get it." "Well," said I, "you will have trouble in the future." So at the house adjoining his store I commenced selling nice comb honey at 18 cents, and extracted at 12½ cents, or 10 pounds for \$1. I visited this town once a week while my honey lasted, selling on each trip an average of 50 pounds of comb honey, and 450 pounds of extracted. It is needless to say that the sale of honey by middle-men in that town was completely ruined.

Well, this is *stale*. It was written for the *BEE JOURNAL* by J. A. Buchanan, and published on page 106. It is "going the rounds" of the papers without credit, when it should have been credited to this paper.

Mr. James Heddon is now an editor. He has just purchased the *Dowagiac Times*, and his first number is on our desk. It looks well and reads well, and we wish him success in this new field of labor.

Bee-Keeping in Russia, says Ben: Perley Poore in the *American Cultivator*, is carried on to a great extent—the annual product being valued at two and a quarter millions of dollars. The expenditure is chiefly made by the Greek Church, the ceremonies of which require such a large consumption of wax candles as to greatly favor this branch of rural economy in Russia, and preserve it from the decline to which it is exposed in other countries, from the increasing use of stearine, oil, gas and other fluids for illuminating purposes. The rearing of bees is now almost exclusively dependent on the manufacture of candles for religious ceremonies, and on the consumption of honey during Lent, it being then used instead of sugar by the strict observers of the fast. The government encourages this branch of rural industry, as affording to the peasant an extra source of income, and has adopted various measures for the accomplishment of this end.

Another "Find" of Wild Honey is thus mentioned by a correspondent from Utica, Pa., in the *New York Sun*. He says:

A few days ago James Cousins and S. P. McCracken were going through the woods, when they were surprised to see bees swarming about an old and very tall tree, near the top. Believing that the tree contained a great store of wild honey, the two men set about securing it. Two 25-foot ladders were spliced together and run up the tree, but they fell 25 feet short of reaching the spot. Cleats were then nailed on the trunk of the tree from the top of the last ladder to the hollow place. Standing on the top pair of cleats one of the men chopped a hole in the trunk. A hollow place 10 feet deep and 14 inches in diameter was found. It was packed full of honey. The mass was taken out entire, without breaking the immense comb, and lowered successfully with ropes to the ground. There were over 300 pounds of honey. After securing the honey the bees were hived, and will lay up their next season's store in a modern hive.

Who says that Pennsylvania is not a bee State? How about combs 10 feet long vs. Langstroth frames! Big story! Happy Cousins!

Catalogues for 1887.—Those on our desk are from

Aspinwall & Treadwell, Barrytown, N. Y.—38 pages—Bee-Keepers' Supplies.
Frank A. Eaton, Bluffton, O.—1 page—Section-Case and Skeleton Honey-Board.
E. S. Armstrong, Jerseyville, Ill.—36 pages—Reversible and Crown Bee-Hives, and Bee-Keepers' Supplies.
Mrs. J. N. Heater, Columbus, Nebr.—4 pages—Bees, and Bee-Keepers' Supplies.
F. A. Salisbury, Syracuse, N. Y.—28 pages—Apiarian Supplies.
Arthur A. Davis, Clark's Green, Pa.—12 pages—Bees, Apiarian Supplies, etc.
J. C. Wilms, Waupun, Wis.—8 pages—Bees, Poultry and Eggs.
Abbott Brothers, Southall, London, England—50 pages—Bee-Hives and Appliances.
Thos. Jackson, Portland, Me.—10 pages—Small Fruit and Nursery Stock.
E. M. Bullard, West Swanzey, N. H.—28 pages—Poultry, Seeds, Plants, etc.
Joseph Nyswander, Des Moines, Iowa—30 pages—Specialties in Apiculture.
A. L. Swinson, Goldsboro, N. C.—2 pages—Queens.

Frank Leslie's Sunday Magazine for April is redolent with the breath of spring, which will soon break all over the land. Here we have picture and poem, song and story, carrying with them the graceful recognition of re-awakening Nature. There are several very beautiful full page engravings, and this number will certainly be generally recognized as an excellent one.

Our Queries

With Replies thereto.

[It is quite useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—ED.]

Contracting the Brood-Nest.

Query, No. 391.—I use a hive holding 9 frames about the Langstroth capacity. After swarming I wish to reduce the number to 7 frames. Would I secure as much honey by using two dummies, one on each side of the brood-nest with a bee-space all around the dummies, or would it be better to use a close-fitting board, and shut the bees out from passing around them?—Subscriber.

I do not think that it would make any difference.—A. J. COOK.

I prefer a close-fitting board.—H. D. CUTTING.

Use close-fitting boards.—C. W. DAYTON.

Either will do, with very little difference in favor of either.—G. M. DOOLITTLE.

The latter method is not so convenient, and possesses no advantages over the former.—W. Z. HUTCHINSON.

I see no objection to the dummies with a bee-space. I have successfully used them.—J. P. H. BROWN.

I think it is better to fasten the bees out from the space occupied by dummies.—G. L. TINKER.

In hot weather the dummies will probably do as well, but for cold weather the close-fitting board is better.—C. C. MILLER.

In the summer months I prefer to let the bees pass under and around the "fillers" at the sides of the combs. I prefer common, loose division-boards hung bee-space apart, to any solid dummy.—G. W. DEMAREE.

We do not believe in close-fitting division-boards. We want a bee-space at the bottom, at least. But we would never advise reducing the hive after swarming.—DADANT & SON.

I do not think it would make much difference which method is adopted. As a matter of convenience, relative to winter packing, I should prefer the tight-fitting boards, as they could be used as a double wall.—J. E. POND.

There would be no difference, only the "dummies" with space all around them are much easier to handle. If you contract at all, why not contract to five Langstroth frames? I am sure that better results will thus be realized. I have practiced contraction on an extensive scale for 5 or 6 years.—JAMES HEDDON.

There is but little choice between these methods.—THE EDITOR.

Characteristics of Best Bees.

Query, No. 392.—Have we what may be called gentle strains of bees that are the equal, as producers of comb honey, of some of the more ill-tempered varieties? In other words, does ill-temper and extra-working quality exist in bees as inseparable factors?—L.

2. Yes, sometimes.—C. W. DAYTON.

1. Yes, certainly so. 2. Not necessarily.—G. M. DOOLITTLE.

Ill-temper and extra-working qualities are not inseparable qualities.—W. Z. HUTCHINSON.

To the first question, I answer yes; to the second, no not in all cases.—H. D. CUTTING.

1. Yes. 2. No, but some very cross bees are also very good workers; for instance, the Cyprians.—DADANT & SON.

Yes, most assuredly. Ill-temper and business are not necessary companions.—A. J. COOK.

I am afraid there is too often some connection between the two; still it is possible that a colony of the best workers may also be very gentle.—C. C. MILLER.

I really think so. What we call well-bred Italians are classed with the gentle varieties of bees, and although I have tried nearly all the races and varieties of bees, I know of none superior, as a rule, to the Italians for comb honey, and for all the purposes that bees can be put to as a source of profit.—G. W. DEMAREE.

Ill-temper and extra-working quality need not exist in bees as inseparable factors; but a very great degree of gentleness in bees is usually attended with a want of energy. A little "snap" in bees is quite as necessary as it is in human beings.—J. P. H. BROWN.

Yes; most undoubtedly. The best honey-gatherers I ever had were the progeny of a gentle queen; these workers were beautiful in color, and so gentle that smoke was seldom required in manipulating them. I have a number of colonies of very gentle bees that were fine workers, so I can say in answer to the second part of the query—not by any means.—J. E. POND.

I think we have, but I have seen no very valuable bees that were exceedingly gentle. A little crossness seems desirable, but not so cross that they cannot be handled without smoke when storing honey. The Syrio-Albino bees are fairly gentle, and there are no better workers as comb-builders. My conclusion is that extra-working quality in bees is somewhat like the go-ahead and resolute working traits of some men—it is always accompanied by a combative and fiery spirit.—G. L. TINKER.

Yes, we have them in judicious crosses of the best strains of German and Italian bees. This answers your last question in the negative.—JAMES HEDDON.

Bees from fine, "gentle" queens are in many cases superior to any cross, ill-tempered or irascible bees in the world.—THE EDITOR.

Transferring Bees Early.

Query, No. 393.—Having 6 colonies of bees, 4 of which are in box-hives, and all in the cellar (here we put them out in the latter part of April), and wishing to stimulate them for rapid increase, will it be wise or prudent to transfer them when first put out of the cellar, as I do not want them in box-hives?—A. G., Vt.

Do not transfer them until the weather is warm, and honey being gathered.—W. Z. HUTCHINSON.

Transfer in fruit-bloom time. Do not transfer until they begin to get honey from some source.—C. W. DAYTON.

I should prefer to wait until fruit bloom.—G. M. DOOLITTLE.

I would not advise transferring so soon; wait until the first fruit bloom.—H. D. CUTTING.

You can transfer them when put out, if you will perform the operation in a close, warm room; use precaution against robbing; and, feed regularly, so that they may not want for sufficient stores.—J. P. H. BROWN.

Transfer them during fruit bloom. You may transfer them earlier, if you feed them and keep them warm, but we would not do it, for there is more danger of robbing.—DADANT & SON.

In my locality I would not transfer bees before fruit-bloom, and I suppose it is the same in your locality.—C. C. MILLER.

I would do it at the time of fruit bloom, or in time of fruit bloom, if by the old method; or at the time of swarming, just before they swarm, if by the better "Heddon method."—A. J. COOK.

There are both advantages and disadvantages connected with so early transferring, and which you will receive the most of depends upon the season, and your skill and management.—JAMES HEDDON.

If they have plenty of stores I would not transfer them until they begin to work on the fruit-bloom. Bees that have plenty of stores do not need stimulating. When bees are transferred when working in the fields, they right things up in better style than if transferred in the fall or too early in the spring. The weather should be warm enough for the bees to spread themselves all over the combs, or they are apt to patch up clubbed-shaped combs.—G. W. DEMAREE.

I would either transfer them when first put out of the cellar, or wait until after swarming, and then pursue the Heddon plan of transferring. I regard it a mistake to transfer bees from box-hives during fruit bloom. It gives them a great back-set from which they do not recover for weeks after. Transfer before they have any brood to speak of, or else wait until you get a full stock of bees, is my advice.—G. L. TINKER.

No, wait until fruit-bloom. Then the weather will be warm enough so that you can "do the job" safely, and the incoming honey will cause the colonies to build up and repair rapidly, and also prevent any tendency

to robbing that would be sure to follow the attempt to transfer earlier.—
J. E. POND.

Transfer them during fruit-bloom.
—THE EDITOR.

Catching Swarms.

Query, No. 394.—Is there any successful method of catching swarms as they issue from a hive?—Monticello, N. Y.

Why, certainly; consult the books.
—A. J. COOK.

None that I should care to practice.
—G. L. TINKER.

Some use a bee-tent with reported success.—G. M. DOOLITTLE.

I have never used a swarm-catcher; but, in my opinion, a swarm-catcher is a possibility, but not a practicability.—W. Z. HUTCHINSON.

Yes. If you see the swarm in time you can catch the queen as she comes out. We have done it often.—DADANT & SON.

They can be caught with a net placed before the entrance. I have often caught them in that way when several swarms were issuing and were liable to cluster together.—C. W. DAYTON.

I have failed to find a good, practical method. A few low trees in the vicinity is good enough for all practical purposes. If they attempt to leave, catch them with a shot-gun.—H. D. CUTTING.

They can be caught by means of a long box partly covered with wire cloth. The box must be placed over the entrance of the hive just when the swarm starts out. I tried this plan during our great swarming year, 1883, but I do not think it "successful" or practicable.—G. W. DEMAREE.

I know of no certain method. One plan is: On the eve of swarming or before, place the empty hive beside the old one, and adjust a yard to the entrances of both hives. This yard, by swarming doors, will admit the queen into it from the hive, but as she cannot get out nor back into the old hive she has to pass into the empty hive followed by the swarm. This plan worked well with fully developed queens, but not with virgin queens.—J. P. H. BROWN.

That depends upon the style of the hive, how arranged in the apiary, and how closely that apiary is watched. Possibly, yes.—JAMES HEDDON.

My queens' wings are clipped, so that if desired the swarm can be caught as it returns. Others have caught swarms at issuing by allowing them to run into an arrangement prepared for the purpose.—C. C. MILLER.

Quite a number of plans have been given during past years; none of them, however, have seemed to me to be practical. I know of nothing better for the purpose than a queen and drone trap; that will catch the queen, and then of course you can manage the swarm.—J. E. POND.

Use a swarm-catcher, or a drone and queen-trap.—THE EDITOR.

Queen-Excluding Sections.

Query, No. 395.—Would it be advisable to make the slots in the sections, so that when two are placed together they will be queen-excluding, and thus save the expense of queen-excluding honey-boards? If not, what would be the objection to this plan?—Ky.

While the plan might be feasible, I have never tried it.—J. P. H. BROWN.

I do not think you can get sections made exact enough to work.—C. C. MILLER.

This plan will do if you must exclude the queen at the expense of ventilation and convenience.—DADANT & SON.

No. Such an arrangement could not be made perfect enough to accomplish the object.—G. M. DOOLITTLE.

No. We need to see between the sections. I prefer $\frac{3}{8}$ of an inch space. We need the honey-board anyway, to keep the sections neat.—A. J. COOK.

In this locality, with the great amount of propolis, they will fill up too many of the spaces. I have had trouble in this line.—H. D. CUTTING.

A queen-excluding honey-board is not always needed, and the openings cannot be made sufficiently exact in the manner mentioned.—W. Z. HUTCHINSON.

I believe that plan would work to advantage, in getting the bees into the sections, but it might be objectionable by reason of brace-combs. It certainly would save the expense of a honey-board.—C. W. DAYTON.

No; the objection would be that the ordinary sections could not be made accurate enough, and if they could be, bees are disposed to stop up the narrow passages made of wood. The use of perforated zinc as a queen-excluder is not open to this objection.—G. L. TINKER.

I have never tested the matter, but fear the workers would not occupy them readily if the slots were so narrow as stated. It is difficult at times to get bees into sections, even when a much larger space than would allow a queen to pass through is given.—J. E. POND.

The objection to the plan is, sufficient accuracy of the width of the slots cannot be obtained in that way. Besides, every section would have to be perfect, and this would add to the cost of making the sections. The shrinking and swelling of wood makes that material unreliable as a queen-excluder.—G. W. DEMAREE.

That will not work; I have tried it. Sections are never made perfect enough; they never will be. Wood in any shape will never prove a success for forming queen-excluding work-passages for bees.—JAMES HEDDON.

The "slots" could not be sufficiently accurate to be depended upon.—THE EDITOR.

The annual meeting of the Stark County Bee-Keepers' Society will occur on Apr. 12, 1887, in Grange Hall (over Farmer's Bank), Canton, O. Officers for the ensuing year will be elected. All bee-keepers are urged to be present, and those having hives or fixtures are requested to bring the same for exhibition. MARK THOMSON, Sec.

Correspondence.

This mark \odot indicates that the apiarist is located near the center of the State named; δ north of the center; φ south; \circ east; \ominus west; and this \nearrow northeast; \nwarrow northwest; \searrow southeast; and \swarrow southwest of the center of the State mentioned.

For the American Bee Journal.

Proposed Honey-Producers' Association

G. M. DOOLITTLE.

I have carefully read and re-read the article on this subject, found on page 774 of the BEE JOURNAL for 1886, and I must confess that I am that thick-headed that I cannot see anything of benefit in the course advised for the world as a whole; not but what I would be the last one to cry prices of our production down to the helping to enrich another beyond a fair compensation for his labor, for this would be unjust to myself. The question that comes to me (and ought to come to every one, it seems to me), is, have I a right, by any combination of persons or monopoly of any kind, to extort money from any or all, that I may receive and reap a benefit to myself? I claim that I have no such right, and any effort on my part so to do is contrary to the teachings of Holy Writ, and shows me to be selfish, not loving my "neighbor as myself."

Again, I object to such a wholesale slaughter of our commission wholesale-dealers. These are charged with being responsible for the low prices of honey, but for the life of me I cannot see how or where. Honest, sober thought, it seems to me, will convince any person who loves his "neighbor as himself," that our present prices of honey have come from a production so great that the "thousandaire" cannot purchase it all, while the wages of the day-laborer have been so reduced that he cannot afford it as a luxury as they could 12 to 16 years ago, when they were getting 300 per cent. better pay than they are now. The persons who have their thousands are not the majority class who consume honey; if they were there would be no oppression in advancing prices to a certain extent.

Who are the consumers of honey? The majority of them are the laboring class who now get from 75 cents with board to \$1.50 and board themselves, for a day's labor. Will Mr. Baldrige change his occupation as an apiarist at the present prices of honey with any of these, thinking to make money at it? I would not. I could not do the labor of any of these men for a single month, and yet I manage my apiary and have double the money as pay for the same at the end of a year that they do; this from the sales from the apiary even at our "ruinous" prices.

Again, the commission men are charged as having "chief interest"

in their commission, cutting prices to "get ahead of their rival commission neighbor." With my knowledge of commission men, this is "slandrous." I have on my books the names of a score or more commission men of whom I would not listen to reports regarding their bad practices, any sooner than I would to such a report regarding my pastor, a brother churchman, or my nearest neighbor. In fact, I know that they do not cut prices for the sake of making sales.

Two or three years ago I had honey in the hands of several of these, and to meet what I was very desirous of meeting, I wrote each to cut prices so that my honey might be sold inside of two weeks, so as to give me the cash I needed. What was the result? With a single exception they all replied by advancing me a liberal amount on my consignment, and saying that they could not cut prices for me, as it would injure the market and cause much loss to others who had placed honey in their hands. To be sure I have found one or two commission men whom I have had to drop from my list; so I have of neighbors and even bee-keepers, but I wish it understood that I believe commission men as upright as the average of mankind.

Then we are told that "every important business, almost, has an organization." Has the wheat-grower such an organization? the fruit-grower, the butter-maker, or the wool grower? These are all parallel cases. If they have, why is it that our farmers are selling wheat for less than the cost of production? Why was it that hundreds of bushels of small fruit was sold the past summer so low as not to pay the cost of freight and handling, say nothing of producing? Are we not getting crazy in thinking that we must organize or do something to prevent our being cheated and beaten by those outside the bee-fraternity?

Once more Mr. B. puts the retail price of honey at from 15 to 25 cents per pound, according to quality, and says that we should supply our home markets first. Does he not know that such prices would exclude our honey from nearly every such market in the land?

A year ago I thought I would try the plan of giving a good, round commission to our store-keepers, and see if I could not enlarge the sale of honey in our town. From the quotations given in the bee-papers I figured what I thought my honey would net me shipped to commission men, and to this I added 20 per cent., as that was the commission I had decided upon as being great enough to induce the local stores to try to push the honey sales.

I then selected what I thought would be sold at home (taking only the very choicest, so as to be sure and have all count in the right direction), and shipped the balance, as I had formerly done. The price placed on the home-sold honey was 16 cents, instead of Mr. B's 25 cents, but the result gave only two cases of honey sold. What was the trouble? The store-

keeper was not to blame, for he used all his persuasive power. A little conversation that I overheard will explain all. It was this: A customer said, "What is the price of honey?" The store-keeper replied, "Sixteen cents. It is nice; let me sell you some."

"What is the price of your best C sugar?" "Six cents."

"Put me up 10 pounds of the sugar, for with it and some water I will make 13 pounds of syrup which will do me just as well as honey; for the prices of labor will not warrant me in any such extravagance as purchasing honey." So said the customer.

When I got returns for my honey shipped to commission men, most of them had sold it for from 1 to 2 cents above quotations, so that I had lost one cent at least per pound on what had been sold at home, and made a failure besides.

Again, it is the bee-keepers of the West that are grumbling as to prices this time, while the year before it was we of the East. Why is this? Simply because last year there was a large crop in the West, while the year before the large crop was in the East. Does this not show us that supply and demand is the great regulator of all this, and not organization? The Bee-Keepers' Union cannot fix the price of honey for the United States, even at the risk of losing that \$1.25 offered to it by Mr. Fayette Lee, if it will do so. My honey brought 1½ cents per pound more in 1886 than in 1885, and does any one suppose that I would have the Union fix the 1885 price on the honey of 1886? No. I hope that bee-keepers will see the folly of such nonsense.

As to the columns of the bee-papers being used as an advertising medium for commission men, I did not so understand it. I supposed that was a part of what belonged to me as a subscriber. No, Mr. Editor, I object to leaving these reports out, and I am not ashamed to have it known that I do so object! After the organization, that Mr. Baldrige wishes is perfected, will he rent a store in some of the many smaller cities of the West, handle and sell all the honey that is sent to him, become responsible for all losses, worry and bother, and pay for the privilege of quoting the prices of honey in the different papers—all for 5 per cent. commission? I trow not. Yet this is all a large proportion of the wholesale commission men ask.

I wish to emphasize Mr. Heddon's statement, that "if we as bee-keepers desire to bring ourselves into bad repute... we could not do it faster than by perfecting this proposed organization," or causing to be enacted legislative laws, both of which, as I understand them, are looking toward that which is not for the good of all concerned, but rather toward selfishness.

Borodino, © N. Y.

The Union Bee-Keepers' Association of Western Iowa will hold their next annual meeting at Dexter, Iowa, on Saturday, Apr. 9, 1887, in the Council Room, at 10 a.m. All interested in bees or honey are requested to be present.

J. E. PRYOR Sec.

For the American Bee Journal.

Regulating the Price of Honey.

GEO. F. ROBBINS.

When Mr. Baldrige said that the commission merchants are largely responsible for the low prices of honey, I think he made a statement that he cannot sustain. It may be so, but I more than doubt it. From what I can learn, I judge that the dealers have good reason to lower prices. It is certainly reasonable to suppose that considerably more honey could be sold at from 11 to 12 cents per pound than at 14 to 16 cents. I am not insensible to the effects of competition in lowering prices; but even commission merchants will generally get the best prices they can; and I should say that a man in that business is far better qualified than are producers, to judge how near or at what prices the demand will take in the supply. I do not believe that the supply could be disposed of at prices 3 cents higher than those now obtained.

But there is yet a soberer phase to this whole matter. The question occurs, are combinations right? for that is what the idea of a honey-producers' association means. I hate combinations. They are the very bulwarks of monopoly, and who does not hate monopolies, except the few who profit directly by them? To be sure, monopolies generally work to the benefit of the few and to the detriment of the many. It is much easier for 100 brewers or fruit-jar manufacturers to combine, than for 100,000 farmers or 10,000 bee-keepers. The last two appear to me impossible, it is true. But we are now assuming, for the sake of argument, that such consolidation of interests and effort are possible. Would such be any the less monopoly, because engineered in the interest of a greater number? Whatever may be the legitimate benefit of association of interests, they always beget clannishness, and clans are characteristically narrow and selfish. There is a great deal of human nature in them, as Mrs. Chaddock would say.

The producer thinks that the middle man makes all the money; the middle man says the producer gets it all. The capitalist tells you that his employees are the only ones who make anything; the employees do not think so, by a long ways. The purchaser thinks a certain price for honey is "awful high;" the apiarist calls it "awful low." So it goes. Now, to be fair with one another, each should place himself, so to speak, in the condition of the other, then adjudicate his warring claims. Hence we honey producers may well pause and inquire if our combinations and arbitrary prices are right.

Mr. B. thinks that 20 to 25 cents per pound for nice honey is only a fair price, and 16 to 18 cents is fair for inferior grades. If he were a wage-earner at \$2 per day—or less—he would not think so. The laborer with a good appetite, who cannot spread the sumptuous table that his employer

can, will be one of our best patrons, if he can reach our prices. But he cannot reach 20 cents per pound, and it is a wrong to keep it beyond his reach if we can otherwise make a living at the business. This I am confident we can do; and, I repeat, must do, if we continue to produce honey in such quantity as we do now.

During the last four years I have fought the downward tendency of prices as stubbornly as any man, but recognizing, as I must, both the necessity and the righteousness of the decline, I can best yield and "make the best of it."

There are two reasons for the downward movement in the prices of honey. One is the general change in the standard of values. Property is increasing much more rapidly than the circulating medium, and the one must adjust itself to the other. The second reason is the rapid growth of the industry itself. There is so much more honey thrown on the market than there was five years ago. That honey has declined out of proportion to other commodities, I agree is true; but it will not always be so. We must, and will, reach a more permanent footing soon. As water will find its level, so our industry will find an equilibrium as nearly as any occupation ever does.

But, chiming with others I would say, there are two things we must do: First, lower the cost of production; second, develop our home markets.

As to the market reports, that column is one of the first I look for, and I would be sorry to miss it.

Mechanicsburg, © Ills.

For the American Bee Journal.

Feeding Syrup to Bees.

J. L. HUBBARD.

I desire to thank those who responded to my query (No. 374) on the above subject, and will now give my experience.

Some 18 or 20 years ago I was selling my surplus bees, and frequently had occasion to feed them, buying sugar at times by the barrel. Thinking the hives did not gain as fast as desirable, I occasionally weighed one before and after feeding, and came to the conclusion that I got an average increase of about 6 pounds for 10 pounds of sugar dissolved to make 16 pounds of syrup. I used to let the syrup boil, but if less than 6 pounds of water was used it would skim over when cool and granulate in the cells. After getting an extractor I added a portion of honey to the mixture and had no more trouble with granulating in the cells, and could use less water.

My object was to show the expense of feeding sugar in comparison with honey. It is an easy matter to have plenty of honey stored in combs for this purpose, saving the labor of extracting and the expense and trouble of re-feeding, for there is a great loss in re-feeding extracted honey as well as feeding sugar syrup.

An experiment in this line I find recorded in another paper. The cor-

respondent says: "To 20 colonies was fed 3,500 pounds of extracted honey, or an average of 175 pounds per colony in 35 days. The total amount of comb honey received from the 3,500 pounds was only 1,250 pounds, or 62½ pounds per colony, all in one-pound sections. The total amount for the 20 brood departments was 800 pounds, or 600 pounds of the 3,500 pounds of extracted honey stored in the 20 hives."

Here we see 1,650 pounds was used for brood rearing and other purposes, while 1,850 pounds was stored, an average of less than 5½ pounds for each 10 pounds fed. In this case a large increase of bees is reported, which was of some value.

Walpole, 9 N. H.

For the American Bee Journal.

Section-Case for Surplus Honey

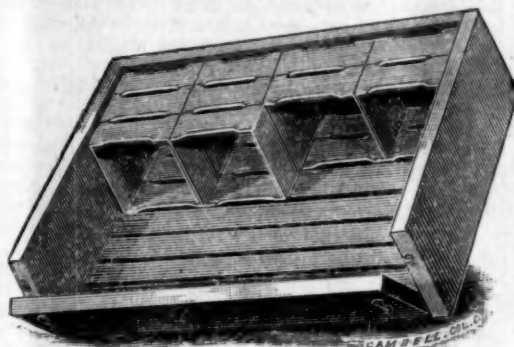
FRANK A. EATON.

I use an 8-frame Langstroth hive for comb honey, and make a section-case of the same material, and of the

one bee-space between each tier. The sections are protected from brace-combs on the bottom, by the slats, the same as in a wide frame without the use of a skeleton honey-board, with a bee-space above and below it, which takes up a valuable space, besides separating the sections too widely from the brood-chamber. The movable or hinged side loosens the sections all at once, making it easy to remove them, and also allows the removal of sections if desired on the hive.

There are important points of construction that would not show in an illustration. The case embraces all the advantages of single-tier, wide frames, and a regular open-case combined, as it allows the use of separators or not, as desired. With wide frames an outer case is necessary to hold them. All I have is the outer case and the bottom-bar of the wide frames combined, doing away with the top and end bars, thereby admitting of taking hold of the top of the section instead of working the sections out of a wide frame, as it is usually done.

Bluffton, Ohio.



Section-Case for Surplus Honey.

For the American Bee Journal.

Temperature and Ventilation.

C. W. DAYTON.

As I believed too much upward hive-ventilation had been given in previous winters when the colonies were in the cellar, when the bees were carried in last fall each hive received two or more thicknesses of burlap that was pretty well covered with propolis. This would greatly retard upward circulation, but still allow some draft. The temperature (as in other winters) has been very steady, never going below 41° or above 43°. On raising these burlap coverings I find the bees motionless, and the underside of the burlap covered with many very large drops of water. Sometimes where the bees cluster close to the covering, the drops of water will be on the outside of the covering, and again where the bees cluster low on the combs the moisture will be attached to the upper part of the combs. Giving the hive a slight jar, a drop will become detached, and in proceeding downward unites with another and another, until quite a

size of the hive. The crates are painted, and when set on the hive they form part of it. If separators are desired, they may be used in this case by slipping a ½-inch strip of tin between the two end rows of sections, so as to prevent the separators from going down between the slats; then, as you put in a row of sections place a separator in. However, I have no need of separators; by using sections 7 to the foot, without separators, they hold as near a pound as it is possible to obtain, and nearly every section can be crated. This statement is not made at random, but from actual experience, in obtaining comb honey without separators from 100 to 150 colonies for the past four years. Many of the cases in use have to be used inside the hive cover to protect them from the weather, and more than one or two cases cannot be used at a time, and have them so protected.

The cover raises with this case, as fast as tiered up, setting on the case the same as on the main hive, it being made of the same material as the hive, thereby protecting the sections the same as the brood-chamber.

It admits of tiering up to the best possible advantage, there being but

quantity of water plunges into the cluster and greatly aggravates the bees.

For the first 50 days no moisture appeared, but from that time on until 90 days after putting them in, the water has appeared. The tendency for the accumulation of moisture (considering the temperature and humidity of the cellar), was so slight that it required nearly 90 days to become visible. Had the temperature of the cellar been lower, it would have taken less time, and *vice versa*. If the temperature of the cellar was low, the warm circulation of the cluster would not proceed upward so far before meeting air whose temperature would condense its moisture. If the temperature is steady the condensation will continue.

It may be supposed that a low temperature causes the bees to generate a greater amount of heat. This is not the case—they only cluster closer together or more compact, and while the temperature is increased at the centre of the cluster, it is less at the outside. I hardly think bees ever resort to activity to become warm.

When the temperature is low a large share of the bees on the outside of the cluster become more or less torpid, so that the cluster may be broken and shaken from the combs, and there will be but few bees in the centre of the cluster that are able to take wing immediately. This may be so in the case of a large colony. Then if the colony was small all of the bees might become torpid or chilled, and a little more cold prove fatal.

I have never noticed indications that the bees on the outside of the cluster changed places with those on the inside when they were in winter quarters, or when they were not rearing brood. When the temperature is such that many of the bees on the outside of the cluster become inactive, they are not wintering well, and though they may remain quiet for a time, indigestion will eventually disorder them. In the case of a large colony there might be comparatively few diseased, so as to manifest symptoms of disease during the remainder of their confinement, but enough healthy bees may still remain to build up the colony to gather honey. If the colony was small, the sick ones would be likely to include all, so that it would soon dwindle away if they should not abscond as soon as removed from the cellar.

When the temperature is low, say at 30°, it causes the bees to cluster compactly, and a large part of the cluster becomes chilled and inactive. If the temperature is high, they remain active and ready to leave the cluster at any occasion. The place to fix the temperature is where the bees on the outside of the cluster will remain clustered because of the cold and for safety. But few if any of them should become stiffened by the cold. Then when there is no disturbance on change of temperature, the bees will remain clustered and motionless all winter, but may be immediately roused to action. When this condition is maintained 90 out of

100 strong colonies will come out strong and healthy in the spring. If the colonies are suspended in "mid-air" the temperature must be 44°. A lower degree of temperature will require coverings of cloth or cushions. The temperature at the center of the cluster averages about 70°, and 56° at the outside, when the bees are quietly clustered.

Bradford, ♂ Iowa.

For the American Bee Journal.

Case for One-Pound Sections.

DR. C. C. MILLER.

In the following letter Mr. Funk refers to a case he has already mentioned on page 121:

"BLOOMINGTON, Ills., March 7, 1887. —I have spent considerable time calculating on a surplus arrangement for comb honey this winter, as I will have to rig up from 50 to 75 more colonies for comb honey this year than before.

On page 121 the reader may see the result of some of my speculations. I think I can make it work. Possibly a strip of wood laid across the honey-board cross-wise, and strips between the cases might be an advantage to support the sections. What does Dr. Miller think of the case as described on page 121?

The objections I have to the T supported case, are the spaces between the sections, and in open-side sections these would be still worse; but I think the case preferable to the Heddon, although my experience is very limited.

The object of this letter is to get Dr. Miller's opinion on some other style of one-pound sections than the 4¼x4¼. With his T case, and the case I intend to use, 4 sections will not be long enough for the Langstroth hive; that is, the case that takes 4 sections (4¼) lengthwise will not be as long as the outside of a Langstroth hive, and of course we do not want another rim or cap over the case.

What would Dr. Miller think of a section 5 inches high by 3 11-16 inches wide? Five of these would fill a case that was 20 inches long, and allow ¾-inch for each end-piece, and give 1-16 of an inch space to allow the section to slide in. His T tins would want some room, but they would make the case stronger, and the ends could then be a little thinner. What length of case does he use now? Also what sections? The advantages of this section would be several—first, and the main one, the case would be as long as a Langstroth hive. Second, this section would look just a little better proportioned than the 4¼—more like the 6¼x5¼, and all know they appear nicer than the 4¼x4¼. The main objection would be an odd size section—but perhaps they would take well. I know they would if they were given favorable mention.

My 240 colonies are doing nicely; I think they will winter well.—H. W. FUNK."

Mr. Funk being a practical beekeeper of good common-sense, and

withal, I think, a good friend of mine, I do not need to try hard to make a very smooth reply.

And now what under the sun does he want to get up a new section for? If every man is his own manufacturer it does not make so much difference, but the fewer kinds there are, the easier, and to a certain extent the cheaper we can get them from the makers or dealers. Is it true that an oblong section presents any more attractive appearance than a square one? I doubt it much, and I do not think that Mr. Funk would care much for anything of the kind only as a kind of a necessity. The necessity arises from the fact that a super long enough for four 4¼x4¼ sections is not as long as a Langstroth hive. Allow me to say that in actual practice that presents no great difficulty. My hives are 20½ inches in length, and my T supers 19½, a difference, you see, of 1½ inches. At the back end there is a space, which, following in the footsteps of Adam Grimm, I consider desirable for ventilation; but if at any time I want the space closed, I simply lay a little pine strip over it, and it is just as well, I think, as if super and hive were the same length. The regular Langstroth, which is better, has frames ¾-inch shorter than mine, so there would be less space to shut.

The open-side sections have been tried, perhaps, more than Mr. F. supposes. I gave them a pretty fair trial. The claim that separators are not needed with them did not prove true in my case, and I do not know of any advantage they possess, although theoretically I thought I saw advantages. I do not believe they will do anything to prevent swarming.

Mr. Funk objects to the space between sections in T supers. Put T tins on the top as well as on the bottom (they only cost \$1 per 100), and no bee can touch the side of the section.

If Mr. Funk should make such an arrangement as he has mentioned, I think 1-16 space for the sections to slide in, will be rather close work.

I never tried it, but I think I should like the ¾-inch board used as a follower. But that could be used in the T super, and I believe Mr. F. might like the T super.

Marengo, ♂ Ills.

For the American Bee Journal.

The Cappings over Honey.

C. P. DADANT.

The reason which Mr. Hutchinson gives, on page 152, for the non-candying of the honey referred to, is not satisfactory to me. If the protection which the cappings afford is sufficient to prevent candying, it must also be sufficient to prevent the absorption of moisture. It is a fact worthy of notice that the same grade of honey which when extracted swells the barrel in which it is contained (air-tight), bursts the cells, and oozes out when left in the comb. I have seen the statement by different parties, that

honey which is left a long time on the hive, will ripen, even if sealed. To my mind the explanation of this is found in Mr. Dibbern's article on page 150. When any honey begins to work or ferment, the bees find it out and attend to it themselves.

There might, however, be one point which would divide the decision of the question, between Mr. Hutchinson and myself. It might be that during the hurry and bustle of a big crop, the bees do not seal the cells as carefully as they would afterwards, and perhaps the leaving of the honey in the hive until long after the crop is ended, permits them to attend to what they had before neglected. This would explain why honey-comb, which has been a long time on the hive, is tougher than that which is removed as soon as sealed. But the fact remains to me most positive, that the bees aim at compact coverings for their honey, while the caps of the brood-cells are porous!

I would suggest to Mr. Dibbern, that the honey in old combs ferments more readily, only when this old comb has contained unsealed honey which has fermented in the cells. If all the honey put by the bees into old comb fermented, there would not be an ounce of sound honey in the brood-chamber of an old colony. Like the juice of all fruits, honey will ferment in sealed vessels if it contains the minute germs, or spores, that are the seed of fermentation. The fermentation is more or less prompt, more or less active, according to the different degrees of temperature and the greater or less amount of watery particles, which furnish the oxygen indispensable to such transformation.

Hamilton, O. Ills.

For the American Bee Journal.

Chaff Hives for Winter.

C. G. BEITEL.

In Mr. J. H. Andre's letter, on page 154, he advances an idea that I have had for some time. I winter all my bees on the summer stands in chaff hives, but I could never see the benefit of chaff on the sides, for although an absorbent of moisture, none can reach there, surrounded and enclosed with boards as it is, and I had decided to try a hive which contains air-tight chambers, lined with paper, but this as well as the chaff hive can only retain the warmth but a short time beyond a single-walled hive, and prevents the rays of the sun from warming it as quickly as a single-walled hive. I have never had much loss from the chaff hives, but my objection to them is their weight and cost over single-walled hives.

Now my convictions are, that bees never die from cold if properly prepared; give them plenty of good food, have them strong, and they will survive the most protracted cold spells, because in these spells they do what Mr. Clarke calls "hibernating," and they eat little or nothing. Diarrhea is not caused by pollen, but by

bad ventilation, so that they are compelled to absorb or inhale their own moisture, sweat, breath, or whatever it is called (which in the case of humanity we all know is a deadly poison), to obviate which an absorbent, such as a cushion on top, is necessary. I have therefore come to the conclusion that a single-walled hive, with a half-story on top containing a cushion, with plenty of good food, will see any strong colony through the coldest winter.

Easton, O. Pa.

For the American Bee Journal.

Protection of Apicultural Inventions.

J. E. POND.

The principle upon which our patent laws are based is as nearly correct as it is possible to make it. The best minds in the world have given the subject careful attention and study, with the result that our system of patent-right protection is the model one of the world. The basis of these laws is the generally recognized idea, by all men of all countries, that the inventive genius of man in any direction that will prove of value, should as much be protected as any other property he may possess, and for the reason that the results of brain-labor are property in any sense in which the word can be used; and to take advantage of these results without the consent of the inventor is theft, and theft of a meaner kind than that of purloining his horses, cattle or money. All honest men admit this, and admitting it, they ought in common decency to respect such property rights as much as they do the contents of a man's pocket-book.

Unfortunately all men are not thus honest, and many that would not steal a penny seem to think that it is all right to rob an inventor by using his invention without his consent, and if possible without his knowledge. The patent law steps in here, and guarantees to the honest inventor such protection as it can afford. What is this protection? It is the granting to the inventor the right for a certain length of time to own and control his invention, and to pursue the infringer and make him pay such money damages as he can show that he has suffered.

Now it may not be known to all that law in patent cases can only be purchased at very expensive figures, and right here is where the trouble lies in protecting patent bee-hives and apicultural appliances. The inventor and patentee of a valuable machine that costs largely to produce, or that is used largely in expensive manufactures, can well afford to pay the high cost of litigation, as the damages that will be gained are large also. Now let us apply this idea to the inventor of a bee-hive, section or any other article of use in the apiary. In the first place the demand for such articles is limited, to a certain extent, and the profit necessarily very small; the infringer, as a rule, is not a manufacturer supplying a large trade,

but an individual in an apiary of not very considerable size. The cost of pursuing into the courts an infringer in a small way, is the same, or nearly so, as the large one, but the damages received in the way of cash, or its equivalent, is small, and in nearly every case would not be sufficient to pay the fee charged, and earned too, by the attorney conducting the suit.

In cases like the above, protection does not protect, for while the law is ample, the inventor is ruined in applying it for purposes of self-protection.

For the above reasons, and for many others that might be given, would they not make this article too long, I deem the patenting of any appliance of our apiaries as an expensive luxury, and one that will not serve the intended purpose. Not that I do not believe in patents, for I do most thoroughly and completely; but the experience of Father Langstroth is ever before me, and I know of no reason why any other would succeed better than he did. The remedy for this state of things may be made the subject of a future article; a complete one will be found, however, in the application of the "golden rule," by allowing to every honest inventor all his legal and moral rights in his invention, and respecting his property produced by brain labor, as though it was his actual chattels or money.

If this state of things should obtain, there would be far less bickering and disputes over hives, etc., and I guarantee that no larger prices would be demanded for them than we are now paying. Is there a bee-keeper in the country who does not recognize the obligations of the moral law? Why not then apply the same to their dealings with their fellow-men?

Foxboro, O. Mass.

For the American Bee Journal.

Phenol and Foul Brood.

S. J. YOUNGMAN.

The first known case of foul brood in this county (Montcalm) was discovered by Mr. A. F. Moon (a veteran bee-master, but now deceased) while transferring a colony from a box-hive to the Harbison hive, over 20 years ago. Mr. Moon was assisted by a Mr. Hiram Rossman; although the malady had never before been seen by Mr. Rossman, it was not new to Mr. Moon, who had met with it repeatedly in transferring.

In the fall of 1885, Mr. Rossman and myself visited an apiary near Greenville, Mich., where foul brood was said to exist. Mr. R. was able at once to detect the presence of the disease, principally by the peculiar odor arising from the hive when opened, and later on by the depleted condition of the hive, and other unmistakable characteristics of the disease. This one case seemed to be all, although it was quite an extensive apiary, and the bee-keeper had been careless. We advised him to destroy the affected colony, which he did, and he recently

told me that he has had no recurrence of the trouble.

I have since seen many cases of foul brood, the result of importing some bees from the South, and find that in the first stages it may be easily eradicated by the use of absolute phenol, fed with diluted honey. First extract all the honey that the affected colony may have, and pour the medicated feed directly into the cells of brood, as well as empty cells, and upon the bees, if they should be in the way. Phenol is carbolic acid in a more concentrated form, and is one of the greatest disinfectants known. All having any trouble with foul brood among their bees should try this remedy; they will find that this much-dreaded disease will soon yield to this treatment.

Cato, Mich.

Read at the N. E. Michigan Convention.

Items in Bee-Keeping.

R. L. TAYLOR.

In bee-keeping the spirit of the adage, "Take care of the pence, and the pounds will take care of themselves," is as applicable as in financial matters, so I will recount some of the "little things" which I have learned in my experience in the apiary.

HOW TO CUT FOUNDATION.

The most convenient way I have discovered to cut foundation into pieces of the right size for sections, is to take a board a foot wide or more, and somewhat longer than the sheets of foundation, to one end of which nail a head-board against which to lay the sheets of foundation to keep them even. This head-board should extend above the main board about 2 inches. Now on each edge of the main board, beginning from the head, at intervals corresponding to the size of the pieces into which it is desired to cut the foundation, securely nail blocks so placed as to extend sufficiently above the board as to slightly overtop the largest pile of foundation it is desired to cut at one operation. These blocks are to guide the rule, and are much better for that purpose than nails.

Now fill the board with foundation, putting in as many piles as the width of the board will accommodate, taking care to keep them of an equal height, and with a good knife, a good lubricator, and a straight edge, begin at the foot of the pile of foundation, and it will be found but the work of a moment to cut from 100 to 500 pieces of just the size required.

For cutting the wax there is nothing so good as a case-knife of good material, with about one-half of the length of the blade removed in such a manner as to leave the remaining part of the blade with a slant from the point of the edge back. Of course the knife should be pretty thin.

For lubricating the knife for cutting wax, nothing is better than a solution of Babbitt's concentrated lye. This lye cannot be well kept exposed to the air, and it seems to lose

its virtue when kept any great length of time in solution; but I have found that it can be kept conveniently in a dry state in a common Mason fruit-jar, if the cover of the jar be kept screwed down.

MATERIAL FOR BEE-FEEDERS.

If wooden feeders are used, no doubt many have had trouble as I have with their checking, so as to cause leakage. By using basswood for feeders I have entirely rid myself of that trouble.

HOW TO CARRY BEES.

For carrying bees into the cellar and taking them out, where two persons are at command, I have found very convenient a horse made by fastening two pieces of light scantling about 18 inches apart, side by side, and supplying the platform thus made with 4 legs of convenient height. The scantling may be fastened together by simply nailing four or five pieces of narrow board across, leaving a space clear for a pair of handles like those of a wheel-barrow at each end; that is, the ends of the scantlings are to serve for handles. The legs should be well braced. Upon this two persons may carry 2 or 3 colonies easily, rapidly, and with little disturbance to the bees. This horse will also be found very convenient for carrying empty hives, cases with sections, etc.

DARKENING CELLAR WINDOWS.

The easiest and most effective way to exclude the light from windows in a bee-cellar, is to tack over the sash of each a piece of tar-paper, such as is used in the walls of buildings. If it is desired to use the window for ventilation, and at the same time to exclude the light, make a light box about 6 inches deep without top or bottom, of such size that when set on its side it will just slip into the window-frame; fill this box with hay or straw, kept in place by narrow slats nailed across both top and bottom, then slip it on its side into the window-frame in such a way as to leave the sash free to open and shut, and there will be ventilation day or night without danger of admitting light.

HOW TO SHEET WAX.

Some may be interested in knowing the proper method of dipping wax for foundation-making. It is a very simple process, but it cost me a good deal of time to learn one or two very simple things. I cannot enter into details, but will say that there cannot be much trouble if the dipping-boards are kept sharp; that is, keep every corner of every edge (side and end) as pronounced and perfect as sharp tools can make them on straight-grained wood, and see that the boards are thoroughly water-soaked, and then have the wax barely warm enough to prevent its hardening on the surface. In other words, the temperature of melting wax is the best temperature, though it will answer to have it a few degrees warmer. It should be remembered that it requires considerable time to reduce the temperature of boiling wax.

A GOOD WAX-EXTRACTOR.

Having a large number of combs to render into wax, I found it a slow operation to effect this with the Swiss wax-extractor, so having a can about 2 feet in diameter, and 20 inches deep, I had a basket made of perforated tin, such as is used in the Swiss wax-extractor, about 5 inches deep, and of a diameter just such as to allow it to slip feely inside the can. The basket is strengthened with heavy wires across the bottom, and has legs of folded tin about 4 inches long, and wire rings for handles.

To operate it, I put the can on the top of the cook-stove in my honey-house, with 2 or 3 inches of water in it; put in the basket and fill up with combs, frames and all, and cover closely. With a fire under it, the water being shallow, it boils quickly, the steam melts the combs in a few minutes, when the frames can be removed and the can refilled—a process which may be repeated several times before removing the refuse; before doing which, opportunity must be given for all the wax to run through the basket. Of course care must be taken to keep the can always supplied with water. The melted wax may be drawn off through a faucet in the can. Lapeer, Mich.

For the American Bee Journal.

How to Market Honey.

A. D. STOCKING.

Mr. Joshua Bull, on page 133, has exactly given my experience in marketing honey, in a much better manner than I am capable of doing. I have long argued this manner of selling honey, and I believe that if this plan was more generally carried out, it would soon solve the problem of the honey market. His plan of small cases for family use I have used for several years, and I am satisfied that I have sold more honey than I could have done without them. I made them to hold from 6 to 18 one-pound sections of several different sizes.

Like Mr. B., I had nice show-cases standing in a prominent place on the counters of the grocers; I also would leave some of these small cases with them, and many a time I have sold a small case where but one or two sections would have been sold but for them. I gather up the cases in the spring, and mine are good yet. Those who have not tried this plan would be surprised at the results. I also have found an excellent market among the farmers. I have had the market prices of Chicago quoted to me, but I have placed my honey by the side of imported honey, and have always sold it at a higher price; and then the contrast between my nice, clean honey, beside the other, would be so great as to advertise mine. Almena, Mich.

There is no Mistake in insisting that as in all other things, so in advertising—the best is the cheapest, no matter what its cost may be.

Local Convention Directory.

1887. Time and place of Meeting.
 Apr. 8.—Union, at Dexter, Iowa.
 J. E. Pryor, Sec., Dexter, Iowa.
 Apr. 12.—Stark County, at Canton, Ohio.
 Mark Thomson, Sec., Canton, O.
 Apr. 16.—Marshall County, at Marshalltown, Iowa.
 J. W. Sanders, Sec., LeGrand, Iowa.

For in order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—Ed.

SELECTIONS FROM
OUR LETTER BOX

Bees all Right.—F. W. Schafer, Eddyville, ♀ Iowa, on March 14, 1887, says:

Bees have wintered nicely so far; out of 22 colonies wintered on the summer stands only one died, and that dwindled on account of diarrhea, I think. Thirty-six colonies in the cellar have come through all right so far. I put them out-doors on the morning of March 12, and some were at work in the afternoon. My father, who has about the same number of colonies, lost two.

Using Foul Broody Combs.—One of our Canadian subscribers writes as follows:

Suppose that foul brood makes its appearance in an apiary that has been run for extracted honey; the combs have been exchanged from one hive to another during the honey-flow, and a good many of them have been taken from diseased colonies, and are at the present time mixed up with combs from healthy colonies. What is best to do with them? Would you melt them all up, or will they be safe to use again?

[By all means melt up the combs—it will not be safe to use them as they are.—Ed.]

Bees in Fine Condition.—A. J. & E. Hatfield, South Bend, ♂ Ind., on March 15, 1887, write:

Our 230 colonies of bees are still in the cellar, and to all appearances they are in the finest possible condition.

Peach-Trees in Full Bloom.—J. W. Howell, Kenton, ♀ Tenn., on March 10, 1887, writes:

My bees gathered their first natural pollen on Jan. 25. The weather has been fine ever since, and the bees have been working lively. Peach-trees are in full bloom, and bees are getting the nectar from them. My colonies are strong and healthy. I lost only 3 out of 125 colonies, in wintering, and all wintered on the summer stands in Langstroth hives. I ship no honey to market. I have built up a home market, and sell all I can produce. I get 12½ cents for sections of 1-lb. each.

Bees in Good Condition.—Otto Kleinow, Detroit, ♂ Mich., on March 11, 1887, writes:

Bees are in very good condition; I expect to have early swarms, as most of my colonies are very strong. I have about 110 colonies of Italian bees; some have Albino queens mated with Italian drones. I also have a few pure Albinos. I think the bees of the queens that are crossed with Albinos, or with Italian drones, are very good honey gatherers—a little better than light-colored Italians.

Alsike Clover for Fodder.—Mr. Wm. M. Carr, Bradford, ♀ N. H., on Feb. 26, 1887, writes thus:

Have you published a leaflet showing the advantages of Alsike clover for fodder? If not, I should think a circular for distribution among farmers would find ready sale among bee-keepers who wish to increase the cultivation of Alsike among their neighbors.

[We have been requested several times to publish a Leaflet on this subject, and will do so at once, as suggested. Its title will be "Alsike Clover for Hay and Pasturage." It will be ready for delivery as soon as this JOURNAL is in the hands of its readers. The prices will be 50 cents per hundred; 500 copies for \$2.25, postpaid. Order at once and scatter them far and wide.—Ed.]

Bees in the Cellar.—Jas. W. Mills, Melleray, ♂ Iowa, on March 15, 1887, writes:

My bees are in the cellar yet. I have lost one colony so far, and some more of them have the diarrhea. I would put some of them out for a cleansing flight, but my cellar is so small, and the hives are crowded in so that I would disturb all the rest of them. One man who had 5 colonies in the cellar, lost all of them. I think that extracting last fall was the cause. Another man had 27 colonies and lost 7. I believe they were on the summer stands.

Condition of Bees in Missouri.—John Blodget, Empire, ♀ Mo., on March 12, 1887, writes:

My bees wintered well, and are bringing in pollen from the maples. I wintered them on the summer stands packed in oat-chaff. Some of my neighbors have lost very heavily, even 70 per cent. of their bees. Clover is all alive, and in all probability we will have a good year for honey. Last year the forepart of the season was good, and then it became so dry that I had to feed some nuclei to keep the queens laying until heart's-ease bloomed; but to the surprise of all there was no honey from that worth speaking of, so feeding was again the order of the day, or lose the weak nuclei, and they have wintered finely.

Legislative Protection.—Reuben Havens, Onarga, ♂ Ills., writes:

As a bee-keeper I ask no special legislative protection; I expect success only by hard work, strictly honest dealing, and striving to meet the wants of my customers in quality, style, and price of product. I find that pleasant words, kind acts, and the free use of honey will do more in controlling a "waspy" disposition than law. When these fail, and "forbearance ceases to be a virtue," and your pockets are large and full of money, go to law; not before. I fully endorse the action of the officers of the National Bee-Keepers' Union, and think if 3,000 instead of 300 would give their support to the Union it would prove grandly successful in protecting the rights of bee-keepers, and securing better prices for honey.

Wages in an Apiary.—C. W. B., of New York, asks the following:

What wages should an experienced man have for taking care of 130 colonies of bees, spring count, from the time they are taken out of the cellar until they are put back in the fall? The apiary is to be worked for comb and extracted honey, and about 50 queens to be reared for the apiary.

[Very much depends upon the locality, how well the 130 colonies are worked, etc. In general terms, I think a modern practical apiarist who is well up with the times, should command one-half more wages, to say the least, than a common laborer. I consider bee-keeping, in its true sense, partly a profession.—JAMES HEDDON.]

Wintering in a Damp Cellar, etc.—Esau Russell, Tiffin, ♂ Iowa, on March 14, 1887, writes:

Last fall I moved my apiary of 70 colonies over three miles, and put them into a cellar of a house where nobody lived last summer, the beginning of December. After they were in 2 or 3 weeks water began to come from the entrances of some of the hives. I gave them more ventilation, and it soon stopped, but the cellar did not prove to be a good one, for the hives became moldy, so I put them all out, and the bees had a good flight on March 1 and 2; it was none too soon, as a great many of them had the diarrhea. I lost 7 colonies out of 70. One colony is a puzzle to me. A little while after I put them out I noticed drones coming out of the hive. A neighbor bee-keeper here said the colony was queenless. I told him that I did not think so, as it was a strong colony of pure Syrians. I examined them and found the queen and capped brood. The drones are fine ones; there are about 70 of them, I should think.

Dr. Miller's Book, "A Year Among the Bees," and the BEE JOURNAL for one year, we will club for \$1.50.



Issued every Wednesday by
THOMAS G. NEWMAN & SON,
 PROPRIETORS,
 923 & 925 WEST MADISON ST., CHICAGO, ILL.
 At One Dollar a Year.

ALFRED H. NEWMAN,
 BUSINESS MANAGER.

Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Money Orders can now be obtained at the Post Offices at reduced rates. Five dollars and under costs now only 5 cents. As these are absolutely safe, it will pay to get them instead of the Postal Notes which are payable to any one who presents them, and are in no way safe.

Preserve your Papers for reference. If you have no **BINDER** we will mail you one for 60 cents, or you can have one **FREE** if you will send us 3 new yearly subscriptions for the **BEE JOURNAL**.

Colored Posters for putting up over honey exhibits at Fairs are quite attractive, as well as useful. We have prepared some for the **BEE JOURNAL**, and will send two or more free of cost to any one who will use them, and try to get up a club.

We will Present Webster's Dictionary (pocket edition), and send it by mail, postpaid, for two subscribers with \$2. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

One Dollar invested for the weekly visits of the **AMERICAN BEE JOURNAL** for 1887, will richly repay every apiarist in America.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have now gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

Honey and Beeswax Market.

The following are our very latest quotations for honey and beeswax:

CHICAGO.

HONEY.—Sellers ask from 7 to 10 cts. for anything off in comb honey; this includes dark undesirable and crooked combs, and 2-pound sections. Good 1-lb. sections, 10½@12c; choice, 12½@13c. Not much call for extracted, and very little for comb.
BEESWAX.—25c. **R. A. BURNETT,**
 Feb. 21. 161 South Water St.

NEW YORK.

HONEY.—We quote: Fancy white in 1-lb. sections, 10½@12c; in 2-lbs. 9½@10c; off grades, 1 to 2 cts. per lb. less. Buckwheat, in 1-lb. sections, 8½@9c; in 2-lbs. 7½@7c. Extracted, California, 5½@5c; buckwheat, 4½@4c. Supply of comb honey is large, and demand for all kinds is improving.
BEESWAX.—21@23c.

MC CAUL & HILDRETH BROS.,
 Jan. 21. 34 Hudson St.

DETROIT.

HONEY.—Best white comb, 10½@11c. Supply large and sales are slow.
BEESWAX.—23c.
 Mar. 11. **M. H. HUNT,** Bell Branch, Mich.

SAN FRANCISCO.

HONEY.—Extracted is firm at 4½@4c., and comb at 8½@12c. per lb.
BEESWAX.—19@21c.
 Feb. 9. **SCHACHT & LEMCKE,** 122-124 Davis St.

BOSTON.

HONEY.—1-lb. packages of white clover honey at 14½@15c; 2-pounds at 11½@12c. Extracted, 5½@7c. Demand for 1-lb. sections lively.
BEESWAX.—24 cts. per lb.
 Mar. 11. **BLAKE & RIPLEY,** 57 Chatham Street.

CINCINNATI.

HONEY.—We quote for extracted, 4½@7c. per lb. Nice comb brings 12½@15c. per lb. in a jobbing way.
BEESWAX.—Good demand, —20@22c. per lb. for good to choice yellow.
 Jan. 22. **C. F. MUTH & SON,** Freeman & Central Av.

CLEVELAND.

HONEY.—Choice white, 1-lb. sections, sells at 12½@13c; second quality white, 10½@11c; white 2-lbs., 10½@11c. Buckwheat, 8½@9c. Extracted, 5½@6c.—Market dull.
BEESWAX.—25c.
 Mar. 9. **A. C. KENDEL,** 115 Ontario Street.

MILWAUKEE.

HONEY.—We quote choice 1-lb. sections at 11½@12c; 2-lbs., 10½@11c. No call for dark. White extracted, in barrels and kegs, 8½@9c; in small packages, 7½@8c; dark, in barrels and kegs, 3½@5c. Demand fair and supply ample.
BEESWAX.—25c.
 Mar. 5. **A. V. BISHOP,** 142 W. Water St.

SAN FRANCISCO.

HONEY.—We quote: Comb, extra white, 12½@13c; amber to white, 8½@11c. Extracted, white, 4½@4c; amber and candied, 3½@4c. Trade is quiet.
 Jan. 10. **O. B. SMITH & CO.,** 453 Front St.

KANSAS CITY.

HONEY.—We quote white clover 1-pounds at 12c; dark 1-lbs., 8½@10c; white clover 2-lbs., 10½@11c; dark 2-lbs., 7½@9c. Extracted, white clover, 6c; dark, 4½@5c; white sage, 5½@5c; amber, 4½@5c.
BEESWAX.—20@23c.
 Jan. 13. **CLEMONS, CLOON & Co.,** cor. 4th & Walnut.

ST. LOUIS.

HONEY.—Choice comb, 10½@12c; latter price is for choice white clover. Strained, in barrels, 3½@4c. Extra fancy of bright color and in No. 1 packages, 4½ advance on above prices. Extracted in barrels, 4½@5c; in cans, 5½@6c. Market dull.
BEESWAX.—Firm at 21c. for prime.
 Feb. 3. **D. G. TUTT & CO.,** Commercial St.

Continuous Advertising brings much larger returns, in proportion to the outlay, than periodic or spasmodic advertising.

By Using the Binder made expressly for this **BEE JOURNAL**, all can have them bound and ready for examination every day in the year. We have reduced the price to 60 cents, postpaid. Subscription for one year and the binder for \$1.50.

OUR CLUBBING LIST.

We supply the **American Bee Journal** one year, and any of the following publications, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both. Club
The American Bee Journal	.....1 00..
and Gleanings in Bee-Culture	.....2 00.. 1 75
Bee-Keepers' Magazine	.....1 25.. 1 25
Bee-Keepers' Guide	.....1 50.. 1 40
The Apiculturist	.....2 00.. 1 70
Canadian Bee Journal	.....2 00.. 1 75
Rays of Light	.....1 50.. 1 35
The 7 above-named papers	.....5 25.. 4 50
and Cook's Manual	.....2 25.. 2 00
Bees and Honey (Newman)	.....2 00.. 1 75
Binder for Am. Bee Journal	.....1 60.. 1 50
Dzierzon's Bee-Book (cloth)	.....3 00.. 2 00
Root's A B C of Bee-Culture	.....2 25.. 2 10
Farmer's Account Book	.....4 00.. 2 00
Guide and Hand-Book	.....1 50.. 1 30
Heddon's book, "Success,"	.....1 50.. 1 40
A Year Among the Bees	.....1 75.. 1 50

One yearly subscription for the **AMERICAN BEE JOURNAL** must be ordered with each paper or book, in order to take advantage of the prices named in the last column.

E. Duncan Sniffen, Advertising Agent, 3 Park Row, New York, inserts advertisements in all first-class Newspapers and Magazines with more promptness and at lower prices than can be obtained elsewhere. He gives special attention to writing and setting up advertisements in the most attractive manner, and guarantees entire satisfaction. In all his dealings, he is honorable and prompt. Send for his Catalogue of first-class advertising mediums. Mailed free. 52A40t

More Premiums.—Mr. L. J. Diehl, of Butler, Ind., offers a colony of Italian bees as a present to the person sending to this office the largest club of subscribers for 1887. The subscriptions may be sent in at any time before the first of May at our regular club rates, and additions made as desired, but it must be stated that you are working for that premium, so that we can keep account of the subscriptions.

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructible. When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

When Renewing your subscription please try to get your neighbor who keeps bees to join with you in taking the **BEE JOURNAL**. It is now so cheap that no one can afford to do without it. We will present a **Binder** for the **BEE JOURNAL** to any one sending us three subscriptions—with \$3.00—direct to this office. It will pay any one to devote a few hours, to get subscribers.

ADVERTISEMENTS.

20 COLONIES of BEES for Sale, in 8-frame Langstroth hives, wired combs, strong in Bees and every way desirable—at \$6.00 per colony. **F. D. NAGLE**, SOUTH HAVEN, MICH. 11A4t

BEES for SALE CHEAP.—50 Colonies of Black and Hybrid Bees, strong, and in 10-frame Langstroth hives. For sale at \$4.50 per Colony. **H. L. PANGBORN**, Maquoketa, Iowa. 11A3t

50 COLONIES of Hybrid Bees for Sale, in Langstroth hives—brood-chamber only—10 full frames in each. Price, \$4.00 each, on cars. **J. W. HOWELL**, Kenton, Tenn. 12A1t

BEES for SALE.

NOT at auction, but I will sell Colonies at \$4.00 to \$6.00 each; 50 to 75 cts. extra for Feeder and 2 or 3 Section-Cases. Five per cent. discount for lots of five Colonies, with Cases; and 10 per cent. off on lots of 10 with Cases—Cash with order. (See adv., p. 157, week before last.) **C. M. HOLLINGSWORTH**, WINNEBAGO, ILLS. 12A1t

MUST Be Sold. My entire Apiary of about 30 Colonies in Langstroth hives. A severe injury prevents caring for them. A BARGAIN! Prices to insure sale. Write to, **JAMES T. NORTON**, WINSTED, CONN. 12A1t

CALIFORNIA APIARIES.

WE have four Apiaries for Sale, varying in price from \$500 to \$1,000.

For detailed description, write or apply to, **FORTH, EASLEY & REPPY, Agts.**, 12A1t SAN BUENAVENTURA, CALIF.

Extracted Honey For Sale.

WE have a large quantity of CHOICE WHITE EXTRACTED HONEY, in kegs holding from 200 lbs. to 225 lbs. each, which we will deliver on board the cars at 7 cents per lb. Orders solicited.

THOS. G. NEWMAN & SON, 923 & 925 West Madison St., CHICAGO, ILL.

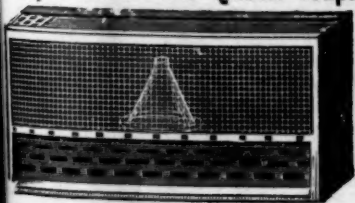
M. S. ROOP, MANUFACTURER OF **APIARIAN SUPPLIES** And Dealer in BEES and HONEY.

Send for my New Circular. Corner North 6th & Mill Streets, 12EtF COUNCIL BLUFFS, IOWA.

90 COLONIES of BEES

FOR SALE.—Italians and Hybrids, on straight worker comb in Langstroth frames. Simple and Chaff hives. Complete Surplus Arrangements. Address, **CHAS. F. KROCH**, Box 475, ORANGE, NEW JERSEY. 12A2t

Alley's Drone and Queen Trap.



Price, by Express, 50 cts.; by mail, 65 cts.; 12 in the set, and one nailed (13 in all), \$3.50; 50, in the set, \$12.00. Address,

THOS. G. NEWMAN & SON, 923 & 925 West Madison St., CHICAGO, ILL.

The NEW Heddon Hive.

WE have made arrangements with the inventor by which we shall make and sell the Heddon Reversible Hive, both at wholesale and retail; nailed and also in the flat.

The brood-chamber is in two sections; also the surplus arrangement, which may be interchanged or inverted at will. The cover, bottom-board, and top and bottom of each sectional case has one-half of a regular bee-space, so that the surplus cases with the sections, may be placed between the two brood-chambers, or the latter may be transposed or inverted—in fact, all parts of this hive are perfectly interchangeable. The brood-frames will ALL be bored for wires.

A SAMPLE HIVE includes the bottom-board and stand; a slatted honey-board, and cover; two 6-inch brood-chambers, each containing 2 frames; two surplus arrangements, each containing 23 one-pound sections, one with wide frames and separators, and the other without separators. This latter chamber can be interchanged with the other stories, but cannot be reversed. It is NAILED AND PAINTED, and ready for immediate use. Price, \$4.00, complete.

It is absolutely essential to order one nailed hive as a pattern for putting those in the flat together correctly.

Hives, nailed and painted, \$4.00 each.

HIVES READY TO NAIL.—In filling orders for these hives, in the flat, we make 6 different combinations, so that our customers may make a selection from the sample nailed hive, without waiting for us to quote prices, and the different kinds will be known by the following numbers:

No. 1 consists of the stand, bottom-board, cover, two 6-inch brood-chambers, 16 frames, and the slatted honey-board. Price, \$1.55 each.

No. 2 is the same as No. 1, with the addition of one surplus story containing 23 sections without separators—interchangeable, but not reversible. Price, \$2.00 each.

No. 3 is the same as No. 2, with two surplus stories as therein described. Price, \$2.50 each.

No. 4 is the same as No. 1, with the addition of one surplus story containing 23 sections in wide frames with separators, which can be reversed, inverted, and interchanged, the same as the brood-chambers. Price, \$2.50 each.

No. 5 is the same as No. 4, with two surplus arrangements as therein described. Price, \$3.00.

No. 6 contains all the parts as described in the sample nailed hive. Price, \$3.75 each.

Those desiring the hives without the stand, honey-board or sections, may make the following deductions from the above prices: Stand, 14 cents; honey-board, 8 cents; and the 23 or 56 sections, as the case may be, at 1/4 cent each, respectively.

We will also make the following deductions on quantities ordered all at one time: For 10 or more hives, 5 per cent. discount; for 25 or more hives 7-1/2 per cent.; for 50 or more, 10 per cent.

THOMAS G. NEWMAN & SON, 923 & 925 West Madison-St., CHICAGO, ILL.

Extraordinary Exchange!

HAVING disposed of my Bee-Supply business, at Des Moines, Iowa, to Joseph Nysewander, I hope my friends and customers will be as generous with him in orders and good-will as they have with me. I am no longer in the supply trade here after March 1, 1887.

12A2t **J. M. SHUCK**.

WANTED.—A man to work in the apiary. Address, **R. GRINSELL**, BADEN, St. Louis Co., MO. 12A1t

75 COLONIES of BEES

FOR Sale, Cheap.—Reason, too many. For 1 or 75, \$4.50 a colony.—Address, **A. P. LAWRENCE**, (Box 90), Hickory Corners, Barry Co., Mich. 12A1t

WANTED.—A practical bee-keeper to assist me in caring for my bees—100 colonies. Address, **S. HATHAWAY**, 12A2t MUNCIE, Delaware Co., IND.

My 19th Annual Price-List of Italian, Cyprian & Holy-Land Bees, Queens and Nuclei Colonies (a specialty): Also Supplies—will be sent to all who send their names and addresses. Address, **H. J. BROWN**, 12-15-18 St. LIGHT STREET, Columbia Co., PA.

WANTED, an active, reliable man in every city and town in Illinois to work up local fraternal benefit societies. Cash pay. Address

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EXCELSIOR HONEY EXTRACTORS



In answer to frequent inquiries for Extractors carrying 3 and 4 Langstroth frames, we have concluded to adopt these two new sizes. The 3 frame basket is in a can of the same size and style as the 2 frame. The 4 frame basket is in the larger can, with the cone or metal standard for the basket to revolve upon, leaving room underneath the basket for 75 or 80 lbs. of honey. It will be complete, with covers, and in every way identical, except in size, with the \$16.00 Extractor, 13x20, which is intended for any size of frame.

Excepting with the \$8.00 Extractors, all the different styles have strainers over the canal leading to the honey gate, and movable sides in the Comb Baskets. The \$2.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x18 inches.....\$8 00
For 2 Langstroth " 10x18 " 8 00
For 3 " " 10x18 " 10 00
For 4 " " 10x18 " 14 00
For 2 frames of any size, 13x20 12 00
For 3 " " 13x20 12 00
For 4 " " 13x20 16 00

THOS. G. NEWMAN & SON, 923 & 925 West Madison Street, CHICAGO, ILL.



\$90 a Month Salary to agents selling goods to dealers. Samples Free. \$40 a month to distribute circulars. Expenses advanced. **National Supply Co., Cincinnati, O.** 12A1y

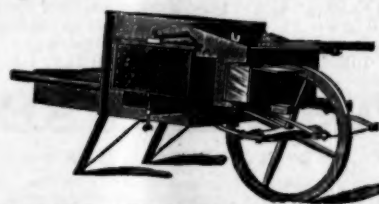
700 POUNDS OF BEES.

DURING first 1/4 of May I will sell the above at \$1.25 per pound. Also Untested Italian Queens bred from Imported Mothers, to go with the Bees, for \$1.25 each. Cash must accompany orders, and be sent before April 20. Reference, 1st Nat'l Bank here. **E. BURKE**, Vincennes, Indiana. 12A3t

100 COLONIES of Italian and Hybrid Bees for sale at bottom figures. Write for prices. **A. J. & E. HATFIELD**, SOUTH BEND, IND. 12EtF

FINE ITALIAN QUEENS for sale, reared from Imported and Home-Bred Mothers. In April, Untested Queens, \$1.25 each, or \$12 per doz.; May to Nov., \$1 each; per doz. \$10. Tested Queens \$1 more; Select Tested, \$1.50 more. Address all orders to, **J. P. Caldwell**, San Marcos, Hays Co., Tex. 8A3t

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DAVIS' PATENT HONEY CARRIAGE, REVOLVING COMB-HANGER, Tool Box and Recording Desk Combined.

Price, complete, only.....\$1:
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BEES and HONEY,

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Management of an Apiary for Pleasure and Profit; by

THOMAS C. NEWMAN,
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It contains 220 profusely illustrated pages is "fully up with the times" in all the improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the honey-bee, and at the same time produce the most honey in its best and most attractive condition. Bound in cloth, \$1.00, postpaid.

A Liberal Discount to Dealers, by the Dozen or Hundred.

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 923 & 925 West Madison St., CHICAGO, ILL.

The AMERICAN BEE JOURNAL for a year and the book, "Bees and Honey," will be sent for \$1.75.

DON'T BUY QUEENS, HIVES, SECTIONS or SUPPLIES

before you send for my Catalogue and Price-List. Address,

J. P. H. BROWN,
 SEgt AUGUSTA, GEORGIA.

BEES! 300 COLONIES ITALIANS

READY for spring delivery at 60 cts. to \$1.00 per pound, according to time. Choice Queens and Brood cheaper in proportion. Also ADJUSTABLE HONEY-CASE, and other Supplies. Circular free. **OLIVER FOSTER,**
 11Atf Mt. Vernon, Linn Co., Iowa.

Jones' Frame Pliers.



FOR taking frames out of hives, or moving them in any way desired. It is made of Japanned iron, and can be utilized in many ways. It has a long claw for loosening frames, and a hook which may be used for carrying other frames besides the one held by the Pliers. Price, 40 cts., by mail.

THOS. G. NEWMAN & SON,
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FULL Colonies of ITALIAN and HYBRID BEES (with lots of brood), in 2-story Standard Langstroth Hives, almost given away.

1 to 5 Colonies.. \$7 50 | See advertisement in
 6 to 10 " 7 00 | American Bee Jour-
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Address, **W. T. MADDOX,**
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THE HORSE,

By B. J. KENDALL, M. D.

A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, a table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison; a table with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.

Price 25 cents—in English or German.

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BEAUTIFUL.

ALL-IN-ONE-PIECE Sections, smooth inside and out. Comb Foundation, Alsike Clover Seed, and everything needed in the apiary.

Send for free price list, and samples of Sections and Foundation.

M. H. HUNT,
 10Etf BELL BRANCH, Wayne Co., MICH.
 Near Detroit.

SECTIONS.

WE make a specialty of the manufacture of DOVE-TAILED SECTIONS of the White Poplar, the whitest and best wood for the purpose. We make all styles and sizes, but recommend the Side-Opening Sections as superior to any other. The great accuracy and fine finish of our Sections are the admiration of everybody. Sample 3 cents. Price-List of Supplies free.

Address, **DR. G. L. TINKER,**
 SEtf NEW PHILADELPHIA, O.

Vandervort Foundation Mill.

6 Inch, Price, \$20.00.

It makes the finest extra thin Foundation for comb honey. For Sale by

THOS. G. NEWMAN & SON,
 923 & 925 West Madison Street, CHICAGO, ILL.

BEES for SALE, Cheap.

100 Colonies of American-reared Italian Bees, best strain, strong, and in 10-frame wired Simplicity hives; for sale at \$8.00 per Colony. **Z. A. CLARK,**
 SEtf ARKADDELPHIA, ARK.

FOR SALE CHEAP, for cash, 1 to 100 Colonies: Bees by the pound, of either Italian or Albino Bees, and QUEENS. — Address, **OTTO KLEINOW,** (Opp. Ft. Wayne Gate), Detroit, Mich.
 SEtf

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